# Tim Onasch

List of Publications by Year
in descending order



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|---|---|---|---|
| 160 papers | 23,256 citations | 12330 69 h-index | 10445 139 g-index |
| 191 all docs | 191 docs citations | 191 times ranked | 9283 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Evolution of Organic Aerosols in the Atmosphere. Science, 2009, 326, 1525-1529. | 12.6 | 3,374 |
| 2 | Ubiquity and dominance of oxygenated species in organic aerosols in anthropogenicallyâ€influenced Northern Hemisphere midlatitudes. Geophysical Research Letters, 2007, 34, . | 4.0 | 1,773 |
| 3 | Chemical and microphysical characterization of ambient aerosols with the aerodyne aerosol mass spectrometer. Mass Spectrometry Reviews, 2007, 26, 185-222. | 5.4 | 1,708 |
| 4 | O/C and OM/OC Ratios of Primary, Secondary, and Ambient Organic Aerosols with High-Resolution Time-of-Flight Aerosol Mass Spectrometry. Environmental Science & Technology, 2008, 42, 4478-4485. | 10.0 | 1,524 |
| 5 | A generalised method for the extraction of chemically resolved mass spectra from Aerodyne aerosol mass spectrometer data. Journal of Aerosol Science, 2004, 35, 909-922. | 3.8 | 702 |
| 6 | An Aerosol Chemical Speciation Monitor (ACSM) for Routine Monitoring of the Composition and Mass Concentrations of Ambient Aerosol. Aerosol Science and Technology, 2011, 45, 780-794. | 3.1 | 675 |
| 7 | Radiative Absorption Enhancements Due to the Mixing State of Atmospheric Black Carbon. Science, 2012, 337, 1078-1081. | 12.6 | 618 |
| 8 | Characterization of ambient aerosols in Mexico City during the MCMA-2003 campaign with Aerosol Mass Spectrometry: results from the CENICA Supersite. Atmospheric Chemistry and Physics, 2006, 6, 925-946. | 4.9 | 341 |
| 9 | Collection Efficiencies in an Aerodyne Aerosol Mass Spectrometer as a Function of Particle Phase for Laboratory Generated Aerosols. Aerosol Science and Technology, 2008, 42, 884-898. | 3.1 | 340 |
| 10 | Soot Particle Aerosol Mass Spectrometer: Development, Validation, and Initial Application. Aerosol Science and Technology, 2012, 46, 804-817. | 3.1 | 316 |
| 11 | Transmission Efficiency of an Aerodynamic Focusing Lens System: Comparison of Model Calculations and Laboratory Measurements for the Aerodyne Aerosol Mass Spectrometer. Aerosol Science and Technology, 2007, 41, 721-733. | 3.1 | 308 |
| 12 | Laboratory studies of the chemical composition and cloud condensation nuclei (CCN) activity of secondary organic aerosol (SOA) and oxidized primary organic aerosol (OPOA). Atmospheric Chemistry and Physics, 2011, 11, 8913-8928. | 4.9 | 307 |
| 13 | Characterization of aerosol photooxidation flow reactors: heterogeneous oxidation, secondary organic aerosol formation and cloud condensation nuclei activity measurements. Atmospheric Measurement Techniques, 2011, 4, 445-461. | 3.1 | 298 |
| 14 | An Inter-Comparison of Instruments Measuring Black Carbon Content of Soot Particles. Aerosol Science and Technology, 2007, 41, 295-314. | 3.1 | 276 |
| 15 | Enhanced light absorption by mixed source black and brown carbon particles in UK winter. Nature Communications, 2015, 6, 8435. | 12.8 | 266 |
| 16 | Relationship between Oxidation Level and Optical Properties of Secondary Organic Aerosol. Environmental Science & Technology, 2013, 47, 6349-6357. | 10.0 | 265 |
| 17 | A Novel Method for Estimating Light-Scattering Properties of Soot Aerosols Using a Modified Single-Particle Soot Photometer. Aerosol Science and Technology, 2007, 41, 125-135. | 3.1 | 258 |
| 18 | Soot Particle Studiesâ€"Instrument Inter-Comparisonâ€"Project Overview. Aerosol Science and Technology, 2010, 44, 592-611. | 3.1 | 228 |

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|---|---|---|---|
| 19 | Humidity-dependent phase state of SOA particles from biogenic and anthropogenic precursors. Atmospheric Chemistry and Physics, 2012, 12, 7517-7529. | 4.9 | 219 |
| 20 | Laboratory and Ambient Particle Density Determinations using Light Scattering in Conjunction with Aerosol Mass Spectrometry. Aerosol Science and Technology, 2007, 41, 343-359. | 3.1 | 208 |
| 21 | Chemically-Resolved Volatility Measurements of Organic Aerosol from Different Sources. Environmental Science & Technology, 2009, 43, 5351-5357. | 10.0 | 201 |
| 22 | Design, Modeling, Optimization, and Experimental Tests of a Particle Beam Width Probe for the Aerodyne Aerosol Mass Spectrometer. Aerosol Science and Technology, 2005, 39, 1143-1163. | 3.1 | 196 |
| 23 | Deliquescence, Efflorescence, and Water Activity in Ammonium Nitrate and Mixed Ammonium Nitrate/Succinic Acid Microparticles. Journal of Physical Chemistry A, 2000, 104, 9337-9346. | 2.5 | 191 |
| 24 | Airborne measurements of western U.S. wildfire emissions: Comparison with prescribed burning and air quality implications. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6108-6129. | 3.3 | 184 |
| 25 | Transitions from Functionalization to Fragmentation Reactions of Laboratory Secondary Organic Aerosol (SOA) Generated from the OH Oxidation of Alkane Precursors. Environmental Science & Technology, 2012, 46, 5430-5437. | 10.0 | 181 |
| 26 | Effect of oxidant concentration, exposure time, and seed particles on secondary organic aerosol chemical composition and yield. Atmospheric Chemistry and Physics, 2015, 15, 3063-3075. | 4.9 | 177 |
| 27 | Use of electrochemical sensors for measurement of air pollution: correcting interference response and validating measurements. Atmospheric Measurement Techniques, 2017, 10, 3575-3588. | 3.1 | 177 |
| 28 | Detection of particle-phase polycyclic aromatic hydrocarbons in Mexico City using an aerosol mass spectrometer. International Journal of Mass Spectrometry, 2007, 263, 152-170. | 1.5 | 167 |
| 29 | Particulate emissions from commercial shipping: Chemical, physical, and optical properties. Journal of Geophysical Research, 2009, 114, . | 3.3 | 162 |
| 30 | Correlation of secondary organic aerosol with odd oxygen in Mexico City. Geophysical Research Letters, 2008, 35, . | 4.0 | 161 |
| 31 | Chemical Smoke Marker Emissions During Flaming and Smoldering Phases of Laboratory Open Burning of Wildland Fuels. Aerosol Science and Technology, 2010, 44, i-v. | 3.1 | 156 |
| 32 | The Detection Efficiency of the Single Particle Soot Photometer. Aerosol Science and Technology, 2010, 44, 612-628. | 3.1 | 151 |
| 33 | Characterization of submicron particles influenced by mixed biogenic and anthropogenic emissions using high-resolution aerosol mass spectrometry: results from CARES. Atmospheric Chemistry and Physics, 2012, 12, 8131-8156. | 4.9 | 146 |
| 34 | Infrared spectroscopic study of the deliquescence and efflorescence of ammonium sulfate aerosol as a function of temperature. Journal of Geophysical Research, 1999, 104, 21317-21326. | 3.3 | 142 |
| 35 | The deposition ice nucleation and immersion freezing potential of amorphous secondary organic aerosol: Pathways for ice and mixedâ€phase cloud formation. Journal of Geophysical Research, 2012, 117, . | 3.3 | 139 |
| 36 | Adsorptive uptake of water by semisolid secondary organic aerosols. Geophysical Research Letters, 2015, 42, 3063-3068. | 4.0 | 139 |

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| 37 | Effect of the Aerosol-Phase State on Secondary Organic Aerosol Formation from the Reactive Uptake of Isoprene-Derived Epoxydiols (IEPOX). Environmental Science and Technology Letters, 2018, 5, 167-174. | 8.7 | 131 |
| 38 | On-Road Measurement of Gas and Particle Phase Pollutant Emission Factors for Individual Heavy-Duty Diesel Trucks. Environmental Science & Technology, 2012, 46, 8511-8518. | 10.0 | 123 |
| 39 | Modeling organic aerosols during MILAGRO: importance of biogenic secondary organic aerosols. Atmospheric Chemistry and Physics, 2009, 9, 6949-6981. | 4.9 | 119 |
| 40 | Reduction in biomass burning aerosol light absorption upon humidification: roles of inorganically-induced hygroscopicity, particle collapse, and photoacoustic heat and mass transfer. Atmospheric Chemistry and Physics, 2009, 9, 8949-8966. | 4.9 | 119 |
| 41 | Aging Effects on Biomass Burning Aerosol Mass and Composition: A Critical Review of Field and Laboratory Studies. Environmental Science & Technology, 2019, 53, 10007-10022. | 10.0 | 116 |
| 42 | Impact of Fuel Quality Regulation and Speed Reductions on Shipping Emissions: Implications for Climate and Air Quality. Environmental Science & Technology, 2011, 45, 9052-9060. | 10.0 | 115 |
| 43 | Characterization of particulate matter emissions from on-road gasoline and diesel vehicles using a soot particle aerosol mass spectrometer. Atmospheric Chemistry and Physics, 2014, 14, 7585-7599. | 4.9 | 115 |
| 44 | Emission and chemistry of organic carbon in the gas and aerosol phase at a sub-urban site near Mexico City in March 2006 during the MILAGRO study. Atmospheric Chemistry and Physics, 2009, 9, 3425-3442. | 4.9 | 114 |
| 45 | Characterization of urban pollutant emission fluxes and ambient concentration distributions using a mobile laboratory with rapid response instrumentation. Faraday Discussions, 2005, 130, 327. | 3.2 | 108 |
| 46 | Investigation of the correlation between odd oxygen and secondary organic aerosol in Mexico City and Houston. Atmospheric Chemistry and Physics, 2010, 10, 8947-8968. | 4.9 | 107 |
| 47 | Regional influence of wildfires on aerosol chemistry in the western US and insights into atmospheric aging of biomass burning organic aerosol. Atmospheric Chemistry and Physics, 2017, 17, 2477-2493. | 4.9 | 107 |
| 48 | Commercial Aircraft Engine Emissions Characterization of in-Use Aircraft at Hartsfield-Jackson Atlanta International Airport. Environmental Science & Technology, 2008, 42, 1877-1883. | 10.0 | 104 |
| 49 | Viscous organic aerosol particles in the upper troposphere: diffusivity-controlled water uptake and ice nucleation?. Atmospheric Chemistry and Physics, 2015, 15, 13599-13613. | 4.9 | 103 |
| 50 | Pollution Gradients and Chemical Characterization ofÂParticulateÂMatter from Vehicular Traffic near Major Roadways: Results from the 2009 Queens College Air Quality Study in NYC. Aerosol Science and Technology, 2012, 46, 1201-1218. | 3.1 | 102 |
| 51 | Arctic sea ice melt leads to atmospheric new particle formation. Scientific Reports, 2017, 7, 3318. | 3.3 | 101 |
| 52 | Light Absorption by Ambient Black and Brown Carbon and its Dependence on Black Carbon Coating State for Two California, USA, Cities in Winter and Summer. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1550-1577. | 3.3 | 99 |
| 53 | Single particle characterization using a light scattering module coupled to a time-of-flight aerosol mass spectrometer. Atmospheric Chemistry and Physics, 2009, 9, 7769-7793. | 4.9 | 98 |
| 54 | Total observed organic carbon (TOOC) in the atmosphere: a synthesis of North American observations. Atmospheric Chemistry and Physics, 2008, 8, 2007-2025. | 4.9 | 94 |

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| 55 | Overview of the 2010 Carbonaceous Aerosols and Radiative Effects Study (CARES). Atmospheric Chemistry and Physics, 2012, 12, 7647-7687. | 4.9 | 94 |
| 56 | Light scattering and absorption by fractal-like carbonaceous chain aggregates: comparison of theories and experiment. Applied Optics, 2007, 46, 6990. | 2.1 | 93 |
| 57 | Measurements of Morphology Changes of Fractal Soot Particles using Coating and Denuding Experiments: Implications for Optical Absorption and Atmospheric Lifetime. Aerosol Science and Technology, 2007, 41, 734-750. | 3.1 | 92 |
| 58 | Chemical evolution of atmospheric organic carbon over multiple generations of oxidation. Nature Chemistry, 2018, 10, 462-468. | 13.6 | 92 |
| 59 | Absorption Enhancement of Coated Absorbing Aerosols: Validation of the Photo-Acoustic Technique for Measuring the Enhancement. Aerosol Science and Technology, 2009, 43, 1006-1012. | 3.1 | 91 |
| 60 | Aerosol Light Extinction Measurements by Cavity Attenuated Phase Shift (CAPS) Spectroscopy: Laboratory Validation and Field Deployment of a Compact Aerosol Particle Extinction Monitor. Aerosol Science and Technology, 2010, 44, 428-435. | 3.1 | 89 |
| 61 | Regional Influence of Aerosol Emissions from Wildfires Driven by Combustion Efficiency: Insights from the BBOP Campaign. Environmental Science & Technology, 2016, 50, 8613-8622. | 10.0 | 89 |
| 62 | Experimental Studies of Vapor-Deposited Waterâ^'Ice Films Using Grazing-Angle FTIR-Reflection Absorption Spectroscopy. Journal of Physical Chemistry B, 1997, 101, 10887-10895. | 2.6 | 88 |
| 63 | Aircraft observations of aerosol composition and ageing in New England and Mid-Atlantic States during the summer 2002 New England Air Quality Study field campaign. Journal of Geophysical Research, 2007, 112, . | 3.3 | 87 |
| 64 | Gas Turbine Engine Emissionsâ€"Part II: Chemical Properties of Particulate Matter. Journal of Engineering for Gas Turbines and Power, 2010, 132, . | 1.1 | 87 |
| 65 | Particulate Emissions of Gas Turbine Engine Combustion of a Fischerâ^'Tropsch Synthetic Fuel. Energy & Fuels, 2010, 24, 5883-5896. | 5.1 | 84 |
| 66 | Radiative absorption enhancements by black carbon controlled by particle-to-particle heterogeneity in composition. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5196-5203. | 7.1 | 84 |
| 67 | Mixing state of carbonaceous aerosol in an urban environment: single particle characterization using the soot particle aerosol mass spectrometer (SP-AMS). Atmospheric Chemistry and Physics, 2015, 15, 1823-1841. | 4.9 | 83 |
| 68 | Chemical Properties of Aircraft Engine Particulate Exhaust Emissions. Journal of Propulsion and Power, 2009, 25, 1121-1137. | 2.2 | 82 |
| 69 | Laboratory characterization of an aerosol chemical speciation monitor with PM<sub>2.5</sub>measurement capability. Aerosol Science and Technology, 2017, 51, 69-83. | 3.1 | 82 |
| 70 | Joint Impacts of Acidity and Viscosity on the Formation of Secondary Organic Aerosol from Isoprene Epoxydiols (IEPOX) in Phase Separated Particles. ACS Earth and Space Chemistry, 2019, 3, 2646-2658. | 2.7 | 80 |
| 71 | Characterization of an aerodynamic lens for transmitting particles greater than 1 micrometer in diameter into the Aerodyne aerosol mass spectrometer. Atmospheric Measurement Techniques, 2013, 6, 3271-3280. | 3.1 | 79 |
| 72 | Transformation of logwood combustion emissions in a smog chamber: formation of secondary organic aerosol and changes in the primary organic aerosol upon daytime and nighttime aging. Atmospheric Chemistry and Physics, 2016, 16, 13251-13269. | 4.9 | 76 |

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| 73 | A case study of ozone production, nitrogen oxides, and the radical budget in Mexico City. Atmospheric Chemistry and Physics, 2009, 9, 2499-2516. | 4.9 | 75 |
| 74 | Oxygenated Aromatic Compounds are Important Precursors of Secondary Organic Aerosol in Biomass-Burning Emissions. Environmental Science & Technology, 2020, 54, 8568-8579. | 10.0 | 72 |
| 75 | Collection efficiency of the soot-particle aerosol mass spectrometer (SP-AMS) for internally mixed particulate black carbon. Atmospheric Measurement Techniques, 2014, 7, 4507-4516. | 3.1 | 71 |
| 76 | Spherical tarball particles form through rapid chemical and physical changes of organic matter in biomass-burning smoke. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19336-19341. | 7.1 | 70 |
| 77 | Particulate Emissions from in-use Commercial Aircraft. Aerosol Science and Technology, 2005, 39, 799-809. | 3.1 | 69 |
| 78 | Sampling Artifacts from Conductive Silicone Tubing. Aerosol Science and Technology, 2009, 43, 855-865. | 3.1 | 68 |
| 79 | Nighttime chemical evolution of aerosol and trace gases in a power plant plume: Implications for secondary organic nitrate and organosulfate aerosol formation, NO<sub>3</sub> radical chemistry, and N<sub>2</sub>O<sub>5</sub> heterogeneous hydrolysis. Journal of Geophysical Research, 2010, 115, . | 3.3 | 67 |
| 80 | Single Scattering Albedo Monitor for Airborne Particulates. Aerosol Science and Technology, 2015, 49, 267-279. | 3.1 | 67 |
| 81 | Observation of Fullerene Soot in Eastern China. Environmental Science and Technology Letters, 2016, 3, 121-126. | 8.7 | 67 |
| 82 | Formation and evolution of tar balls from northwestern US wildfires. Atmospheric Chemistry and Physics, 2018, 18, 11289-11301. | 4.9 | 67 |
| 83 | Importance of historical contingency in the stereochemistry of hydratase-dehydratase enzymes. Science, 1995, 269, 527-529. | 12.6 | 66 |
| 84 | Application of high-resolution time-of-flight chemical ionization mass spectrometry measurements to estimate volatility distributions of Î±-pinene and naphthalene oxidation products. Atmospheric Measurement Techniques, 2015, 8, 1-18. | 3.1 | 63 |
| 85 | Crystallization Kinetics of Nitric Acid Dihydrate Aerosols. The Journal of Physical Chemistry, 1996, 100, 9127-9137. | 2.9 | 62 |
| 86 | Aerosol mixing state, hygroscopic growth and cloud activation efficiency during MIRAGE 2006. Atmospheric Chemistry and Physics, 2013, 13, 5049-5062. | 4.9 | 60 |
| 87 | Evolution of Vehicle Exhaust Particles in the Atmosphere. Journal of the Air and Waste Management Association, 2010, 60, 1192-1203. | 1.9 | 59 |
| 88 | Mass spectrometry of refractory black carbon particles from six sources: carbon-cluster and oxygenated ions. Atmospheric Chemistry and Physics, 2014, 14, 2591-2603. | 4.9 | 59 |
| 89 | A case study into the measurement of ship emissions from plume intercepts of the NOAA ship <i>Miller Freeman</i>. Atmospheric Chemistry and Physics, 2014, 14, 1337-1352. | 4.9 | 58 |
| 90 | Technical Note: Use of a beam width probe in an Aerosol Mass Spectrometer to monitor particle collection efficiency in the field. Atmospheric Chemistry and Physics, 2007, 7, 549-556. | 4.9 | 57 |

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| 91 | Evaluation of mobile emissions contributions to Mexico City's emissions inventory using on-road and cross-road emission measurements and ambient data. Atmospheric Chemistry and Physics, 2009, 9, 6305-6317. | 4.9 | 53 |
| 92 | Temperature-Dependent Heterogeneous Efflorescence of Mixed Ammonium Sulfate/Calcium Carbonate Particles. Journal of Physical Chemistry A, 2000, 104, 10797-10806. | 2.5 | 52 |
| 93 | Chemistry of new particle growth in mixed urban and biogenic emissions â€“ insights from CARES. Atmospheric Chemistry and Physics, 2014, 14, 6477-6494. | 4.9 | 52 |
| 94 | Low Fractal Dimension Cluster-Dilute Soot Aggregates from a Premixed Flame. Physical Review Letters, 2009, 102, 235504. | 7.8 | 51 |
| 95 | Laboratory evaluation of species-dependent relative ionization efficiencies in the Aerodyne Aerosol Mass Spectrometer. Aerosol Science and Technology, 2018, 52, 626-641. | 3.1 | 49 |
| 96 | Determination of particulate lead using aerosol mass spectrometry: MILAGRO/MCMA-2006 observations. Atmospheric Chemistry and Physics, 2010, 10, 5371-5389. | 4.9 | 48 |
| 97 | Characterization of black carbonâ€containing particles from soot particle aerosol mass spectrometer measurements on the R/V Atlantis during CalNex 2010. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2575-2593. | 3.3 | 47 |
| 98 | Extensive Soot Compaction by Cloud Processing from Laboratory and Field Observations. Scientific Reports, 2019, 9, 11824. | 3.3 | 47 |
| 99 | Mass Spectral Analysis of Organic Aerosol Formed Downwind of the Deepwater Horizon Oil Spill: Field Studies and Laboratory Confirmations. Environmental Science & Technology, 2012, 46, 8025-8034. | 10.0 | 45 |
| 100 | Black carbon emissions from in-use ships: a California regional assessment. Atmospheric Chemistry and Physics, 2014, 14, 1881-1896. | 4.9 | 45 |
| 101 | Chemical Compositions of Black Carbon Particle Cores and Coatings via Soot Particle Aerosol Mass Spectrometry with Photoionization and Electron Ionization. Journal of Physical Chemistry A, 2015, 119, 4589-4599. | 2.5 | 44 |
| 102 | Rapid evolution of aerosol particles and their optical properties downwind of wildfires in the western US. Atmospheric Chemistry and Physics, 2020, 20, 13319-13341. | 4.9 | 44 |
| 103 | Controlled nitric oxide production via O(<sup>1</sup>D)â€¯+â€¯N<sub>2</sub>O reactions for use in oxidation flow reactor studies. Atmospheric Measurement Techniques, 2017, 10, 2283-2298. | 3.1 | 42 |
| 104 | CCN activation experiments with adipic acid: effect of particle phase and adipic acid coatings on soluble and insoluble particles. Atmospheric Chemistry and Physics, 2008, 8, 3735-3748. | 4.9 | 41 |
| 105 | Application of positive matrix factorization to on-road measurements for source apportionment of diesel- and gasoline-powered vehicle emissions in Mexico City. Atmospheric Chemistry and Physics, 2010, 10, 3629-3644. | 4.9 | 41 |
| 106 | Intercomparison of a Cavity Attenuated Phase Shift-based extinction monitor (CAPS PMex) with an integrating nephelometer and a filter-based absorption monitor. Atmospheric Measurement Techniques, 2013, 6, 1141-1151. | 3.1 | 41 |
| 107 | Influence of Emissions and Aqueous Processing on Particles Containing Black Carbon in a Polluted Urban Environment: Insights From a Soot Particleâ€Aerosol Mass Spectrometer. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6648-6666. | 3.3 | 41 |
| 108 | Biomass-burning-derived particles from a wide variety of fuels â€“ Part 2: Effects of photochemical aging on particle optical and chemical properties. Atmospheric Chemistry and Physics, 2020, 20, 8511-8532. | 4.9 | 41 |

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| 109 | Spatial and temporal variability of particulate polycyclic aromatic hydrocarbons in Mexico City. Atmospheric Chemistry and Physics, 2008, 8, 3093-3105. | 4.9 | 40 |
| 110 | Atmospheric Measurements of the Physical Evolution of Aircraft Exhaust Plumes. Environmental Science & Technology, 2013, 47, 3513-3520. | 10.0 | 40 |
| 111 | Condensed-phase biogenicâ€“anthropogenic interactions with implications for cold cloud formation. Faraday Discussions, 2017, 200, 165-194. | 3.2 | 40 |
| 112 | Novel insights on new particle formation derived from a pan-european observing system. Scientific Reports, 2018, 8, 1482. | 3.3 | 39 |
| 113 | Microphysical Modeling of Ground-Level Aircraft-Emitted Aerosol Formation: Roles of Sulfur-Containing Species. Journal of Propulsion and Power, 2008, 24, 590-602. | 2.2 | 38 |
| 114 | The Cooling Rate- and Volatility-Dependent Glass-Forming Properties of Organic Aerosols Measured by Broadband Dielectric Spectroscopy. Environmental Science & Technology, 2019, 53, 12366-12378. | 10.0 | 37 |
| 115 | Response to Comment on "Radiative Absorption Enhancements Due to the Mixing State of Atmospheric Black Carbon". Science, 2013, 339, 393-393. | 12.6 | 35 |
| 116 | Measurement and modeling of the multiwavelength optical properties of uncoated flame-generated soot. Atmospheric Chemistry and Physics, 2018, 18, 12141-12159. | 4.9 | 35 |
| 117 | Implementation of a Markov Chain Monte Carlo method to inorganic aerosol modeling of observations from the MCMA-2003 campaign â€“ PartÂII: Model application to the CENICA, Pedregal and Santa Ana sites. Atmospheric Chemistry and Physics, 2006, 6, 4889-4904. | 4.9 | 34 |
| 118 | Laboratory study of the heterogeneous ice nucleation on black-carbon-containing aerosol. Atmospheric Chemistry and Physics, 2019, 19, 12175-12194. | 4.9 | 32 |
| 119 | Relating aerosol mass spectra to composition and nanostructure of soot particles. Carbon, 2019, 142, 535-546. | 10.3 | 32 |
| 120 | Gas Turbine Engine Emissionsâ€”Part I: Volatile Organic Compounds and Nitrogen Oxides. Journal of Engineering for Gas Turbines and Power, 2010, 132, . | 1.1 | 31 |
| 121 | Organic particle types by single-particle measurements using a time-of-flight aerosol mass spectrometer coupled with a light scattering module. Atmospheric Measurement Techniques, 2013, 6, 187-197. | 3.1 | 31 |
| 122 | Inkjet-Printed Gold Nanoparticle Surfaces for the Detection of Low Molecular Weight Biomolecules by Laser Desorption/Ionization Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2015, 26, 1931-1937. | 2.8 | 31 |
| 123 | Impact of Biofuel Blends on Black Carbon Emissions from a Gas Turbine Engine. Energy & Fuels, 2020, 34, 4958-4966. | 5.1 | 30 |
| 124 | Composition-dependent freezing nucleation rates for HNO3/H2O aerosols resembling gravity-wave-perturbed stratospheric particles. Journal of Geophysical Research, 1998, 103, 28439-28450. | 3.3 | 29 |
| 125 | Investigations of SP-AMS Carbon Ion Distributions as a Function of Refractory Black Carbon Particle Type. Aerosol Science and Technology, 2015, 49, 409-422. | 3.1 | 29 |
| 126 | Detecting Fugitive Emissions of 1,3-Butadiene and Styrene from a Petrochemical Facility: An Application of a Mobile Laboratory and a Modified Proton Transfer Reaction Mass Spectrometer. Industrial & Engineering Chemistry Research, 2012, 51, 12706-12711. | 3.7 | 26 |

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| 127 | Characterization of trace metals on soot aerosol particles with the SP-AMS: detection and quantification. Atmospheric Measurement Techniques, 2015, 8, 4803-4815. | 3.1 | 26 |
| 128 | Investigation of Refractory Black Carbon-Containing Particle Morphologies Using the Single-Particle Soot Photometer (SP2). Aerosol Science and Technology, 2015, 49, 872-885. | 3.1 | 25 |
| 129 | Modeling organic aerosol from the oxidation of Î±-pinene in a Potential Aerosol Mass (PAM) chamber. Atmospheric Chemistry and Physics, 2013, 13, 5017-5031. | 4.9 | 24 |
| 130 | Composition and Sources of the Organic Particle Emissions from Aircraft Engines. Aerosol Science and Technology, 2014, 48, 61-73. | 3.1 | 23 |
| 131 | Dilution impacts on smoke aging: evidence in Biomass Burning Observation Project (BBOP) data. Atmospheric Chemistry and Physics, 2021, 21, 6839-6855. | 4.9 | 23 |
| 132 | The effects of morphology, mobility size, and secondary organic aerosol (SOA) material coating on the ice nucleation activity of black carbon in the cirrus regime. Atmospheric Chemistry and Physics, 2020, 20, 13957-13984. | 4.9 | 23 |
| 133 | Design and Characterization of a Fluidized Bed Aerosol Generator: A Source for Dry, Submicrometer Aerosol. Aerosol Science and Technology, 2000, 32, 465-481. | 3.1 | 22 |
| 134 | Combustion and Destruction/Removal Efficiencies of In-Use Chemical Flares in the Greater Houston Area. Industrial & Engineering Chemistry Research, 2012, 51, 12685-12696. | 3.7 | 20 |
| 135 | In-situ characterization of metal nanoparticles and their organic coatings using laser-vaporization aerosol mass spectrometry. Nano Research, 2015, 8, 3780-3795. | 10.4 | 20 |
| 136 | Formation of refractory black carbon by SP2-induced charring of organic aerosol. Aerosol Science and Technology, 2018, 52, 1345-1350. | 3.1 | 20 |
| 137 | Morphology based particle segregation by electrostatic charge. Journal of Aerosol Science, 2008, 39, 785-792. | 3.8 | 19 |
| 138 | Direct Measurement of Aircraft Engine Soot Emissions Using a Cavity-Attenuated Phase Shift (CAPS)-Based Extinction Monitor. Aerosol Science and Technology, 2011, 45, 1319-1325. | 3.1 | 18 |
| 139 | Implementation of a Markov Chain Monte Carlo method to inorganic aerosol modeling of observations from the MCMA-2003 campaign â€“ PartÂI: Model description and application to the La Merced site. Atmospheric Chemistry and Physics, 2006, 6, 4867-4888. | 4.9 | 16 |
| 140 | Collection efficiency of <i>Î±</i>-pinene secondary organic aerosol particles explored via light-scattering single-particle aerosol mass spectrometry. Atmospheric Measurement Techniques, 2017, 10, 1139-1154. | 3.1 | 16 |
| 141 | Kinetically controlled glass transition measurement of organic aerosol thin films using broadband dielectric spectroscopy. Atmospheric Measurement Techniques, 2018, 11, 3479-3490. | 3.1 | 15 |
| 142 | Assessment of a regulatory measurement system for the determination of the non-volatile particulate matter emissions from commercial aircraft engines. Journal of Aerosol Science, 2021, 154, 105734. | 3.8 | 15 |
| 143 | Effect of Thermodenuding on the Structure of Nascent Flame Soot Aggregates. Atmosphere, 2017, 8, 166. | 2.3 | 14 |
| 144 | Examining the chemical composition of black carbon particles from biomass burning with SP-AMS. Journal of Aerosol Science, 2018, 120, 12-21. | 3.8 | 14 |

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| 145 | Understanding Composition, Formation, and Aging of Organic Aerosols in Wildfire Emissions via Combined Mountain Top and Airborne Measurements. ACS Symposium Series, 2018, , 363-385. | 0.5 | 10 |
| 146 | Ethylene Glycol Emissions from On-road Vehicles. Environmental Science & Technology, 2015, 49, 3322-3329. | 10.0 | 9 |
| 147 | Evaluating the use of satellite observations to supplement ground-level air quality data in selected cities in low- and middle-income countries. Atmospheric Environment, 2019, 218, 117016. | 4.1 | 9 |
| 148 | Particle detection using the dual-vaporizer configuration of the soot particle Aerosol Mass Spectrometer (SP-AMS). Aerosol Science and Technology, 2021, 55, 254-267. | 3.1 | 7 |
| 149 | Airborne and laboratory studies of an IAGOS instrumentation package containing a modified CAPS particle extinction monitor. Aerosol Science and Technology, 2017, 51, 1240-1253. | 3.1 | 6 |
| 150 | Technical note: Pyrolysis principles explain time-resolved organic aerosol release from biomass burning. Atmospheric Chemistry and Physics, 2021, 21, 15605-15618. | 4.9 | 5 |
| 151 | ChakrabartyetÂal.Reply:. Physical Review Letters, 2010, 104, . | 7.8 | 4 |
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